UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/539,188	06/16/2005	Nobuhiro Ito	14633.0008USWO	2230
52835 7590 11/24/2009 HAMRE, SCHUMANN, MUELLER & LARSON, P.C. P.O. BOX 2902			EXAMINER	
			NWAONICHA, CHUKWUMA O	
MINNEAPOLI	MINNEAPOLIS, MN 55402-0902		ART UNIT	PAPER NUMBER
			1621	
			MAIL DATE	DELIVERY MODE
			11/24/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/539,188	ITO ET AL.
Office Action Summary	Examiner	Art Unit
	CHUKWUMA O. NWAONICHA	1621
The MAILING DATE of this communication a Period for Reply	appears on the cover sheet with the o	correspondence address
A SHORTENED STATUTORY PERIOD FOR REF WHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory peri - Failure to reply within the set or extended period for reply will, by sta Any reply received by the Office later than three months after the ma earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATION 1.136(a). In no event, however, may a reply be tired will apply and will expire SIX (6) MONTHS from tute, cause the application to become ABANDONE	N. mely filed the mailing date of this communication. ED (35 U.S.C. § 133).
Status		
1) ■ Responsive to communication(s) filed on 12 2a) ■ This action is FINAL. 2b) ■ This action is FINAL. 2b) ■ This action is application is in condition for allow closed in accordance with the practice under the condition of the condition is in condition.	his action is non-final. wance except for formal matters, pro	
Disposition of Claims		
4) Claim(s) 1-3 and 5-13 is/are pending in the above claim(s) is/are withd 5) Claim(s) 11 and 12 is/are allowed. 6) Claim(s) 1-3,5-10 and 13 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and	rawn from consideration.	
Application Papers		
9) The specification is objected to by the Examination The drawing(s) filed on is/are: a) and applicant may not request that any objection to the Replacement drawing sheet(s) including the correct of the sheet of the sh	ccepted or b) objected to by the he drawing(s) be held in abeyance. Se ection is required if the drawing(s) is ob	e 37 CFR 1.85(a). ejected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
 12) Acknowledgment is made of a claim for forei a) All b) Some * c) None of: 1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the priority docume application from the International Bure * See the attached detailed Office action for a limit of the priority docume 	ents have been received. ents have been received in Applicat riority documents have been receive eau (PCT Rule 17.2(a)).	ion No ed in this National Stage
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08)	4) ☐ Interview Summary Paper No(s)/Mail D 5) ☐ Notice of Informal F	ate
Paper No(s)/Mail Date <u>09/10/2009</u> .	6)	

DETAILED ACTION

Current Status

- 1. This action is responsive to Applicants' amendment of 12 August 2009.
- 2. Receipt and entry of Applicants' amendment is acknowledged.
- 3. Claims 1-3 and 5-13 are pending in the application.

The 103 rejection of claims 1-3, 5-10 and 13 under 35 U.S.C. 103(a) as being unpatentable over Dingwen et al., $\{JP\ 4517402\}$ in view of Kato et al., $\{US\ 4,874,890\}$ is maintained for the reason stated in the previous Office Action dated 05/12/2009. Applicants' arguments filed 12 August 2009 have been fully considered but they are not persuasive because Applicants claimed process is obvious in view Dingwen et al. and Kato et al. because all the claimed elements (D_2O , platinum catalyst, etc.) were known in the prior arts and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention. The variation of the reaction medium (acidic medium, basic medium or neutral medium) in a chemical reaction is a well-known chemical practice to optimize the process efficiency of the system and does not constitute a patentable distinction absent a showing of criticality.

Applicants further argue that claim 1 does not require D_2 gas. Applicants' argument is not persuasive because Applicants process does not exclude the use of D_2 gas in claim I as the claim uses the open ended language "**comprises**" which allows for the use of different reagents than the ones recited in the claim, for example D_2 gas.

THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chukwuma O. Nwaonicha whose telephone number is 571-272-2908. The examiner can normally be reached on Monday thru Friday, 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Sullivan can be reached on 571-272-0779. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

Application/Control Number: 10/539,188 Page 4

Art Unit: 1621

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

/Chukwuma O. Nwaonicha/ Examiner, Art Unit 1621

> /PORFIRIO NAZARIO GONZALEZ/ Primary Examiner, Art Unit 1621